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## Raymond L. Strassburger Vice President,

Vice President, Global Government Relations, Telecom, Internet and Advanced Technology Policy

October 10, 2000

Ms. Magalie Roman Salas Secretary Federal Communications Commission 445 Twelfth Street, S.W. Room TWD204 Washington, DC 20544

Re: In the Matter of Numbering Resources Optimization, CC Docket No.99-200, Ex Parte File

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Dear Ms. Salas:

Pursuant to the Commission's rules, this letter serves as notification that on October 4, 2000, at the request of FCC staff, Dave Bench, Senior Advisor-Industry Forums, Nortel Networks, and the undersigned met via telephone with Common Carrier Bureau staff Yog Varma, Diane Harmon, Aaron Goldberger, Cheryl Callahan; Wireless Bureau staff Patrick Forster; and OET staff Jerome Stanshine. The subject of the meeting concerned issues in the referenced docket.

Nortel Networks' oral presentation and answers to questions raised by FCC staff were based on the enclosed written document prepared by David Bench.

A copy of this communication is being provided to each of the FCC staff present at the meeting.

If you have any questions, please communicate with the undersigned.

Sincerely

Raymond L. Strassburger

Vice President, Global Government Relations,

Telecom, Internet and Advanced Technology Policy

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**Enclosures** 

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## **ERRATUM**

Released: July 11, 2000

By the Common Carrier Bureau, Network Services Division:

On March 31, 2000, the Commission released a Report and Order and Further Notice of Proposed Rulemaking. These errata correct certain errors in the released text.

- 1. This erratum amends paragraph 29 by changing "360" to "365."
- 2. This erratum amends paragraph 162 by changing "current quarterly forecast" to "current forecast."
- 3. This erratum amends paragraph 264 by changing "sections 52.7 through 52.19" to "Part 52."
  - 4. This erratum amends paragraph 264 by changing "Appendix B" to "Appendix A."

FEDERAL COMMUNICATIONS COMMISSION

s/
L. Charles Keller
Chief, Network Services Division
Common Carrier Bureau

The use of a zero or one in the first position of the Central Office Code portion of the telephone number is being used today, by the industry, for uses that are not end user dialable. Examples of these uses are as follows: testing, inward operator, centrex or PBX routing and special billing applications. In order to use this resource for customer assignable numbers, all existing applications must be identified and assigned to another NANP resource. Some of these application translate into trunk type connections. Random assignment of these uses in existing NANP resources might translate into line type routes. Release of these codes will cause a strain on existing resources and would take many years to clear.

Special uses of D-digit 0 or 1:

The issue with the D-digit for things like TTC codes is really one of security. The basis for operator to operator dialing, and probably for some forms of test line access and other applications, is to use numbers that are known to be blocked from unauthorized locations ANYWHERE IN THE NANP, including all forms of subscriber lines. A 10 digit number, with D-digit set to 0 or 1, satisfies that requirement. If an Operator Services Switch receives a call with such a called party number, it can be reasonably confident that the call originated from an authorized location, such as another OSS, no matter what part of the country the call comes from. The NANP needs to allow calls from authorized locations anywhere in the NANP while blocking calls from ordinary lines. In many instances these codes were created and used prior to the adoption of Direct Distance Dialing (DDD). Opening the "D" digit would mean re-training of all telephone operators and re-publication of all operator bulletins

It isn't good enough to simply assign some working number to allow "inward" routing to an operator center, because there wouldn't be any way to ensure that every operating company in the NANP would block access to that number from unauthorized callers. Essentially, an algorithm would be needed to identify "privileged" numbers, which the D digit check accomplished quite nicely. If the algorithm is implemented in all end offices in the NANP, this would insure compliance.

In the past, ways were found to breach security based on D-digit, and fixes had to be added to plug the holes. With the increasing numbers of operating companies, it may become impossible in future to trust any such algorithmic approach. This would create a whole new method of fraud. As an example, some tandem switches block calls with a 0 or 1 in the "A" or "D" digit location because they are not "valid" NANP numbers

Generic Requirements, for switching system capabilities, prohibit using the zero and one as the first digit of the Central Office Code. New Generic Requirements would need to be produced to change this requirement.

"The INC has determined that the industry already uses the "0" and "1" as the first digit following the Area Code for purposes that identify numbers that cannot be dialed by end users. This use precludes the release of these resources for use in extending the life of the present 10 digit NANP."

OSSs used for billing, translations, and automated testing use these codes in today's telephone operation. All of these systems would need changing prior to anyone using 0 or 1 in the "D" digit. All OSSs, and switch translation tables would need to be changed across the entire NANP before any area code could open these codes. In addition, switch vendors would need to remove any checking tables (fraud detection) before deployment across the NANP. All NANP switching systems would have to deploy this software prior to the first deployment of these codes in any area. This would besimilar to the Y2K check.

The following is a list of publish uses of the codes 000 through 199.

NANP NETWORK (AT&T / BOC-LEC / Stentor-Canada / C&W-Caribbean / etc.)
ROUTING CODES 0XX / 1XX / special NXX
Includes historical use of some codes as well as many current generic uses
Code - Description
000 - Rate Quote System

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001 -> 005 - (spare- available for: TTC's, pseudo c.o. codes, etc.)
006 - Intl. ATME (TAS-2 Domain ONLY) 006 ->
008 - InWATS OSO routings (from multiple states/NPA's) (1960's/70's)
009 - Rate Ouote System
010 - (RESERVED)
011 - IDDD Access / IOTC: International Originating Toll Center
012 - Alt.Route via Principal Tandem (i.e., due to Sector Tandem failure)
013 - (TWX function - but what?)
014 - 4-Row TWX Assistance Opr (954-1212 converts to 014-1212); from 510 TWX (1960's/70's), and
Canadian TWX Operator from certain provinces (1960's/70's/80's) sometimes from 710/810/910 TWX
(1960's/70's),
015 -> 019 - TWX: NPA/510/610 to N10 routings, N10 to 510/610 routings (note that the N10 SAC is
converted to 01N)(1960's/70's and Canada 1980's)
020 -> 021 - TWX: N10 (4-R) to NPA (3-R) routings (note 0+NPA) (1960's/70's)
022 -> 029 - (spare- available for: TTC's, pseudo c.o. codes, etc.)
030 -> 031 - TWX: N10 (4-R) to NPA (3-R) routings (note 0+NPA) (1960's/70's)
032 -> 039 - (spare- available for: TTC's, pseudo c.o. codes, etc.)
040 -> 041 - TWX: N10 (4-R) to NPA (3-R) routings (note 0+NPA) (1960's/70's)
042 -> 049 - (spare- available for: TTC's, pseudo c.o. codes, etc.)
050 -> 051 - TWX: N10 (4-R) to NPA (3-R) routings (note 0+NPA) (1960's/70's)
052 -> 059 - (spare- available for: TTC's, pseudo c.o. codes, etc.)
060 -> 061 - TWX: N10 (4-R) to NPA (3-R) routings (note 0+NPA) (1960's/70's)
062 -> 069 - (spare- available for: TTC's, pseudo c.o. codes, etc.)
070 -> 071 - TWX: N10 (4-R) to NPA (3-R) routings (note 0+NPA) (1960's/70's)
072 -> 079 - (RESERVED- for Autovon?)
080 -> 081 - TWX: N10 (4-R) to NPA (3-R) routings (note 0+NPA) (1960's/70's)
082->087,9 - InWATS Tndm routings (third-digit Band; 089 Bnd-1)(1960's/70's)
088 - (spare- available for: TTC's, pseudo c.o. codes, etc.)
090 -> 091 -TWX: N10 (4-R) to NPA (3-R) routings (note 0+NPA) (1960's/70's)
092 -> 099 - (spare- available for: TTC's, pseudo c.o. codes, etc.)
100 - Plant Test: Test Board
101 - Plant Test: Test Board
102 - Plant Test: Milliwatt Tone (~1004 Hz)
103 - Plant Test: Signaling Test Termination
104 - Plant Test: 2-Way Transmission and Noise Test
105 - Plant Test: Auto. Transm. Measurement System/Remote Offc. Test Line
106 - Plant Test: CCSA Loop Transmission Test
107 - Plant Test: Par-Meter Generator
108 - Plant Test: CCSA Loop Echo Support Maintenance
109 - Plant Test: Echo Canceler Test Line
110 -> 119 - Operator Codes
11362 - Air-to-Ground / Maritime-Marine / High-Seas / Trains
115X(1) - Leave Word
116X(1) - Calling-Card Validation System
120 - Network Emergency Center
121 - Inward Operator
122->127,9 - InWATS TSO routings (third-digit Band; 129 Band-1)(1960's/70's)
122 - AT&T Ready-Line 800 (1980's)
128 - (RESERVED)
130 - TWX Assistance Operator (3-Row) (1960's/70's)
131 - Directory Operator
132->137,9 - InWATS TSO routings (third-digit Band; 139 Band-1)(1960's/70's)
138 - Mexico: Hermosillo SON- Numbers routings (pre-1977); IDDD Equal Access routings- 011+ (mid-
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140 - TWX Assistance Operator (4-Row) (1960's/70's and Canada 1980's)

114 - Rate & Route Operator

- 142->147,9 InWATS TSO routings (third-digit Band; 149 Band-1)(1960's/70's)
- 148 Mexico: Hermosillo SON- Operators (1970's, 1980's)
- 150 Cable Control: Hawaii (WAS 157 until 1977, when PR got 800-468)
- 151 International Assistance Operator
- 152->157,9 InWATS TSO routings (third-digit Band; 159 Band-1)(1960's/70's)
- 158 Mexico: Chihuahua CHI- Numbers routings (pre-1977); IDDD Equal Access routings- 01+ (mid-1980's on)
- 160 International Operator Center (IOC)
- 161 Trunk Trouble Reporting
- 162->167,9 InWATS TSO routings (third-digit Band; 169 Band-1)(1960's/70's)
- 168 Mexico: Chihuahua CHI- Operators (1970's, 1980's)
- 170 Mexico: Monterrey NL- Numbers routings (pre-1977)
- 171 Mexico: Monterrey NL- Operators (1970's, 1980's)
- 172 Caribbean: Dom.Rep., Puerto Rico, US Virgin Islands (1970's)
- 173 Caribbean: Bahamas (1970's)
- 174 Cable Control: Puerto Rico, US Virgin Islands (1970's)
- 175 Caribbean: Jamaica (Cayman Islands) (1970's)
- 176 Caribbean: Bermuda (1970's); Mexico: Mexicali BCN- Operators (1980's)
- 177 Cable Control: Dominican Republic (1970's)
- 178 Caribbean: Barbados (Dominica, St. Lucia, St. Vincent) (1970's)
- 179 Caribbean: Trinidad/Tobago (Grenada thru 1986) (1970's)
- 180 Mexico: Mexico City DF- Numbers routings (pre-1977); Numbers routings for \_ALL\_ of +52 Mexico (1977-on)
- 181 Toll Station Operator (for Ring-Downs)
- 182 -> 188 ISCs- International Switching Centers (Gateways):
- 182 WHPLNY: 02 0201T 4A (70s); 104T 05 0504T 4E (80s); 103T 03 0203T (90s)
- 183 NYCMNY: 04 AA02T 4M (70s); 063T 24 BW24T 4E (80s); 111T 55 BW55T (90s)
- 184 PITBPA: 02 DG42T 4A (70s); 076T 03 DG43T 4E (80s); 115T 09 DG09T (90s)
- 185 JCVLFL: 02 CL01T 4A (70s); 041T 03 CL03T 4E (80s); ATLNGA: 007T 04 TL01T (90s);
- VANCBC: 02 0104T 4A (70s)- CANADA
- 186 OKLDCA: 03 0341T 4M (70s); 070T 06 0344T 4E (80s); SCRMCA: 083T 04 0404T (90s)
- 187 DNVRCA: 03 MA03T 4A (70s); 027T 05 ZJ05T 4E (80s); SHOKCA: 084T 05 0296T (90s)
- 188 NYCMNY: 10 BW01T 4A (70s); 062T 50 5450T 4E (80s);?013T -- 5410T (90s)? MTRLPQ: 01 0201T 4A (70s)- CANADA
- 189 Mexico: Mexico City DF- Operators (1970's, 1980's)
- 190 Mexico: Operator routings for \_ALL\_ of +52 Mexico (1980's)
- 191 Conference Operator Loop-Around (1970's); AT&T Advanced 800 Intercept Recording Frames (1980's)
- 192 Cable Control: Jamaica (Cayman Islands) (1970's)
- 193 Cable Control: Trinidad/Tobago (Grenada/Carriacou) (1970's)
- 194 Cable Control: ?? Bahamas ?? (1970's); Mexico: Tijuana BCN- Operators (1980's)
- 195 Cable Control: Antigua/Barbuda (Anguilla, Br. Virgin Islands, Montserrat, St.Kitts/Nevis) (1970's); AT&T Advanced 800 (1980's)
- 196 TTC for Oprs/Tst at Wayne PA RC (1960's) as: 196+1X1/11XX/10X [Wayne was not Principal City for NPA 215 (Philadelphia-2 was), but circa 1972 Wayne got its own 215+0XX+ Oprs/Tst TTC Code];
- Cable Control: Barbados (Dominica, St.Lucia, St.Vincent) (1970's); AT&T International 800 (1980's)
- 197 Caribbean: Antigua/Barbuda (Anguilla, Br. Virgin Islands, Montserrat, St.Kitts/Nevis) (1970's); AT&T Direct-Services Dialing Concept (1980's)
- 198 TTC for Oprs/Tst for Rockdale GA RC (1960's): 198+1X1/11XX/10X [Rockdale was not Principal City for NPA 404 (Atlanta was), but circa 1972 Rockdale got its own 404+0XX+ Oprs/Tst TTC Code];
- Cable Control: ?? Bermuda ?? (1970's); AT&T International City Service Center (ICSC) (1980's)
- 199 -Mexico: Monterrey NL (Oprs? Numbers?) (1960's); Cable Control: Alaska (1970's); AT&T USA Direct (1980's)
- 11XX(X) Operator Codes (Leave Word, BLV/Interrupt, Card Validation):
- 11362 Mobile / Marine-Maritime / High-Seas / Air-Ground / Trains
- 1150(1) Universal or Coin Callback Operator

## David H. Bench Nortel Networks Senior Advisor-Industry Forums

- 1151(1) Conference Operator
- 1152(1), 1182(1) Mobile Service / Air-Ground Operator
- 1153(1), 1183(1) Marine Service Operator
- 1154(1), 1188(1) Toll Terminal Operator
- 1155(1) Time and Charges Callback Operator
- 1156(1) Hotel / Motel Callback Operator
- 1157(1) IOTC Access Trunk
- 1158(1) BOC/LEC Inward Completion Assistance
- 1159(1) BOC/LEC Inward Busy-Line Verification
- 1160(1) Calling Card Validation (Dial-Pulse)
- 1161(1) Calling Card Validation (DTMF)
- 1162(1) Calling Card Validation (MF)

## OLD 3-digit "Step" Service Codes (generic uses; both customer and operator)

- 112 DDD Toll/Tandem/CAMA Switch Access
- 113 Directory Assistance (Information)
- 114 Repair Service
- 115 Mobile/Marine/Air-Ground/Conference Operator
- 116 Local Area Toll Station Operator
- 117 Test Board
- 118-N-1 Ringback (Multi 4/8/10/Rural Party Lines)
- 119-1 Ringback (Two-Party Lines)
- 110 Outward Toll Cordboard Operator